



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/651,454	08/29/2003	Masahiro Kato	B-5226 621227-3	8752
36716	7590	11/15/2005		
LADAS & PARRY 5670 WILSHIRE BOULEVARD, SUITE 2100 LOS ANGELES, CA 90036-5679			EXAMINER GOMA, TAWFIK A	
			ART UNIT	PAPER NUMBER
			2653	
DATE MAILED: 11/15/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/651,454	Applicant(s) KATO ET AL.	
	Examiner Tawfik Goma	Art Unit 2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 6-9 is/are rejected.
- 7) ☒ Claim(s) 2-5 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Yanagawa et al (US Patent Publication 2002/0067672).

Regarding claim 1, Yanagawa discloses a tilt correcting apparatus for correcting a tilt amount of a light beam to be radiated from a pickup to a disk (fig. 1), the apparatus comprising: a pre-pit signal producer configured to produce a pre-pit signal indicative of an existence/nonexistence of a pre-pit formed on the disk on the basis of returned light of the light beam radiated onto the disk (52, fig. 1 and S13, fig. 18); an RF signal producer configured to produced an RF signal from bits of information recorded on the disk on the basis of the returned light (par. 49); a correcting-amount deciding unit configured to decide an optimum tilt-correcting amount by making use of a relationship between the pre-pit signal and the RF signal (75, 80, and 87, fig. 14 and S13, fig. 18); and a tilt corrector configured to correct the tilt amount on the basis of the optimum tilt-correcting amount (88, fig. 4).

Regarding claim 6, Yanagawa further discloses wherein the correcting-amount deciding unit further comprises a correction profile producing device configured to allow the optimum tilt-correcting amount to be obtained at each correcting reference position determined previously on the disk and configured to produce a correction profile consisting of the optimum tilt-correcting amount at each correcting reference position (S21, fig. 20); and wherein the tilt corrector is configured to correct the tilt amount on the basis of the correction profile (S25, fig. 20).

Regarding claim 7, Yanagawa further discloses a disk rotation controller configured to make the disk rotate, the disk rotation controller configured to make the disk rotate at a constant angular velocity in cases where the correcting-amount deciding unit obtains the optimum tilt-correcting amount at each correcting reference position (par. 67).

Regarding claim 8, Yanagawa further discloses a memory configured to memorize the optimum tilt-correcting amount obtained at each of a plurality of radial positions of the disk (71, fig. 14 and S26 fig. 20).

Method claim 9 is drawn to the method of using the corresponding apparatus claimed in claim 1. Therefore method claim 1 corresponds to apparatus claim 1 and is rejected for the same reasons of anticipation as used above.

Allowable Subject Matter

Claim Objections

Claims 2-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 2-5 are allowable over the prior art of record because the prior art of record including closest references Yanagawa (U.S. Patent Publication 2002/0067672) and Kunimatsu (US Patent Publication 2002/0114237), considered in combination or individually, fail to suggest or fairly teach a tilt correction apparatus including a combination of a first tilt detector based on an RF signal amplitude and a second tilt detector based on a prepit signal amplitude in which the tilt correction is based on a difference between the two tilt detection amounts.

Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sato et al (US Patent 6690632) discloses a tilt servo apparatus, which corrects the tilt based on the amplitude of the RF signal. Fujita (US Patent 6526007) discloses a tilt detection method that uses a difference of two wobble signal amplitudes to detect the tilt amount.

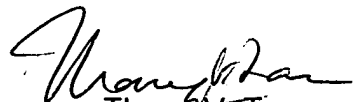
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tawfik Goma whose telephone number is (571) 272-4206. The examiner can normally be reached on 8:30 am - 5:00 pm.

Art Unit: 2653

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Tawfik Goma
11/7/2005


Thang V. Tran
Primary Examiner
11/7/2005